

Singapore Sustainable **Laboratories Group**

A committee under the Sustainable Energy Association of Singapore, partnered with the Energy Research Institute @ NTU.

Who We Are

The Singapore Sustainable Lab Group (S2Lab) is a focused interest group under the Sustainable Energy Association of Singapore (SEAS), aiming to bring together experts and key players in laboratory and high-tech facility design, construction, maintenance and operation to discuss topics on energy efficiency, health and safety, and best practices for operation and maintenance. S2Lab supported is Singapore's National Environment Agency and affiliated with International Institute Sustainable Laboratories (12SL) international chapter.



National Environment

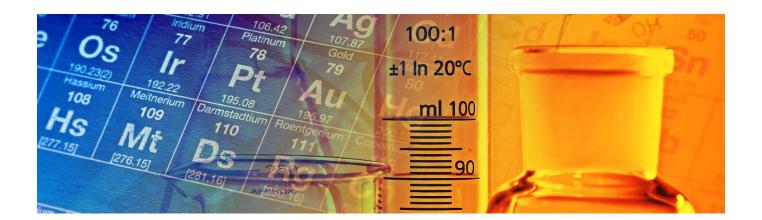


Typical energy consumption in lab facilities?

- Singapore, office buildings 140-420 consume kWh/m2/year
- Labs can consume 5-10 times more energy per floor area than office buildings
- Labs can reach up to 100 times more energy than office buildings

Why is energy consumption higher in Labs?

- Typical offices require fresh air of ~ 1 ACH
- Labs often require 100% outdoor air at 6-12 ACH
- Many labs arbitrarily set OA to 15-25 ACH
- Office plug loads 5.4-10.8 W/m² (0.5-1 W/ft²)
- Laboratory plug loads 21.5-215 W/m² (2-20 W/ft²)



SNAP SHOT OF PAST EVENTS

The Sustainable Laboratories Conference





I²SL Business Mission





UPCOMING EVENTS IN 2017

S/N	Event	Date
1.	Sustainable Laboratory Committee Meeting	7 February 2017
2.	Laboratory Design Guide with Engineering, Safety &	23 & 24 February 2017
	Environmental Considerations	
3.	Smart & Sustainable Laboratories: Best Practices in Design,	14 March 2017
	Operations & Controls	
4.	Demand Ventilation Controls in Laboratory	23 May 2017
5.	Sustainable Laboratory Committee Meeting	31 May 2017
6.	Risk Assessments for Ventilation in Laboratories	21 July 2017
7.	Sustainable Laboratory Committee Meeting	8 September 2017
8.	Green Mark for Laboratories	19 & 20 October 2017
9.	Sustainable Laboratory Committee Meeting	8 December 2017

^{**} Dates subject to changes



Singapore Sustainable Laboratories Group

A committee under the Sustainable Energy Association of Singapore, partnered with the Energy Research Institute @ NTU.

How you can be a part of the Sustainable Laboratories Group

Join as a member of the Sustainable Energy Association of Singapore (SEAS). Visit www.seas.org.sg and click on the "Join SEAS" button.

Benefits:

- Knowledge exchange and discussion on topics relevant to sustainable laboratories and high-tech facilities in tropical climates though regular meetings and newsletters
- Networking opportunities with local and international industry experts
- Stay connected on Singapore specific and regional topics through dialogues with government agencies
- Complimentary access to other SEAS committee meetings and member only events. Other SEAS committees include: Clean Energy, Energy Efficiency, Sustainable Mobility
- Get connected to government finance assistance schemes and private financing
- Full and Affiliate members only: Complimentary display and management of your company name, logo and profile on the Singapore Sustainable Energy Directory

Contact Us

Phone:63379886 Email:info@seas.org.sg Web:s2labs.sg





Energy Research Institute @ NTU

Singapore Sustainable Laboratories Group

1 Cleantech Loop, CleanTech One, #02-16, Singapore 637141.